

REMARKS

Claims 1, 3-5, 7, 9-16, 18-19 and 32-38 are pending in this application. Claims 1, 9 and 32 have been amended. No new claims have been added. No new matter has been added. Claims 7-8, 20, 22-32, 34 and 38-39 have been canceled without prejudice to the subject matter thereof. Applicants respectfully submit the rejections of the canceled claims are now moot.

Reconsideration and allowance of this application is respectfully requested.

Rejections Under 35 U.S.C.112

In the Office Action mailed May 19, 2006, the Examiner rejected claims 1, 3-5, 7-16, 18-20, and 22-39 (all pending claims at the time) as failing to comply with the written description requirement. Applicants respectfully traverse such rejection as it is applied to the now pending claims.

Specifically, the Examiner asserts that claim 1 does not comply with the written description requirement alleging the limitation “epoxidized soybean oil secondary plasticizer” finds no support in written description of the present disclosure as a secondary plasticizer. (See p. 2 of Office Action). Applicants direct the Examiner’s attention to page 5, lines 30-33 of the specification, wherein the applicants have disclosed that an exemplary embodiment may comprise “a secondary plasticizer in small amounts for heat stabilization.” Furthermore, at page 6, line 12, the applicants have disclosed “epoxidized soybean oil” as providing heat stabilization properties. Epoxidized soybean oil is a known plasticizer (see U.S. Patent No. 6,849,675, filed, 1/23/2002, a copy of which is enclosed for the Examiner’s reference). As such the specification clearly supports epoxidized soybean oil as a secondary plasticizer, in view of the inherent and described heat stabilization properties. See *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (applicant may rely on inherency for support when it is established that the missing descriptive matter is necessarily present and that it would be so recognized by persons of ordinary skill in the art). The heat stabilization of epoxidized soybean oil is disclosed, and its inherent plasticizer properties are readily recognized by persons of ordinary skill in the art. If a patent application discloses a device or a product that inherently has a property or performs a function, the patent application may later be amended to recite the function or property without introducing new matter. See *In re Reynolds*, 443 F.2d 384, 170 USPQ 94 (CCPA 1971); *In re Smythe*, 480 F. 2d 1376, 178 USPQ 279 (CCPA 1973); and *Schering Corp. v. Amgen Inc.*, 222

F.3d 1347, 1352 (Fed. Cir. 2000) (“The fundamental inquiry is whether the material added by amendment was inherently contained in the original application); *See also* MPEP 2163.07(a). In view of the ‘675 patent and the Examiner’s own statements of the knowledge regarding epoxidized soybean oil as a plasticizer, one of ordinary skill in the art would recognize that epoxidized soybean oil, having inherent heat stabilization properties, is disclosed as a suitable secondary plasticizer for heat stabilization.

Claims 20, 31 and 39 were also rejected for failing to comply with the written description requirement. Claims 20, 31 and 39 have been canceled without prejudice to the subject matter thereof.

In view of the foregoing, Applicants respectfully request withdrawal of the Examiner’s rejection under 35 USC §112.

Rejections Under 35 U.S.C. 103(a)

Claims 3-5, 7-16, 18-20, 22-30, 33, and 35-37 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gerace (U.S. Patent No. 5,658,969 (“Gerace”)) in combination with either Giessler et al (U.S. Patent No. 3,627,707 (“Giessler”)) or Clas et al. (U.S. Patent No. 3,917,550 (“Clas”)). Independent claims 1 and 9 have been amended. Claims 7-8, 20, 22-32, 34 and 38-39 have been canceled without prejudice to the subject matter thereof.

Independent claims 1 and 9, as currently amended, each require 40-60% PVC resin and 20-25% primary plasticizer by weight of the compound, and that the compound “comprises 0.3% or less of water, and wherein said compound is a putty-like, malleable compound at room temperature and retains a desired shape at temperatures from room temperature up to 275 °F. Gerace is directed to plastisol *coatings* and *adhesives*, wherein microspheres are wetted with a surfactant/plasticizer, such as di-iso-nonyl phthalate (DINP). Gerace is specifically directed to plastisols formulated with preference to “minimizing the viscosity of the plastisol coating or adhesive” to prevent foaming during use. (See column 5, 18-20). The examples of Gerace fail to teach or suggest the claimed malleable compound.

Gerace fails to teach or suggest a malleable compound that retains its shape up to 275 °F. and fails to teach a malleable compound having 40-60% polyvinyl chloride resin and 20-25% primary plasticizer. Example 1 of Gerace includes 32.5 kg of PVC and at least 48.1 kg of plasticizer (DINP) in a 99.8 kg plastisol. Those elements are present at 32.% and 48.2% respectively, well outside the claimed 40-60% PVC and 20-25% primary plasticizer. Example 2

of Gerace is even further removed, providing 15% PVC and 57.4% DINP. Nothing in Gerace teaches or suggests a composition, as claimed, having 40-60% PVC, 20-25 % primary plasticizer, and wherein the compound is malleable at room temperature and maintains a desired shape at temperatures up to 275 °F.

The Examiner has asserted that the amounts of the claimed compound are found in claim 1 of Clas. Clas also is directed to plastisols, particularly including bonding aids such that the plastisol forms a bond with uncleaned substrates to provide “firm adhesion on surfaces.” (See column 1, 28-35. Clas, however, fails to teach or suggest the thixotropic agent organic filler rheology modifier now more particularly recited in applicants’ claims, nor any relative amount of such element to provide a putty-like, maleable compound at room temperature that retains a desired shape at temperatures from room temperature up to 275 °F.

In view of the lack of teaching or suggestion to provide the presently claimed compound incorporating 40-60% PVC, 20-25% primary plasticizer, 1-3% epoxidized soybean oil secondary plasticizer, a heat stabilizer comprising zinc, dry expanded microspheres, glass microspheres and a rheology modifier comprising a thixotropic agent comprising an organic filler, wherein the modeling compound comprises .3% or less of water, and wherein said compound is a putty-like, malleable compound at room temperature and retains a desired shape at temperatures from room temperature up to 275 °F, it appears the Examiner has impermissibly used hindsight reconstruction.

It is impermissible to simply backtrack from the invention to find a connection to the prior art. *W.L. Gore and Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540 (Fed. Cir. 1983). There must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1385, 58 USPQ 2d 1286, 1293 (Fed. Cir. 2001). A rejection cannot be predicated on the mere identification of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. *In re Werner Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2D (BNA) 1313, 1317 (Fed. Cir. 2000). “[C]ombining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability, the essence of hindsight.” *In re Dembiczak*, 50 USPQ2d 1614, 1617 (1999).

The Examiner further rejected claims 32, 34 and 38 over Gerace in combination with Giessler or Clas, and further in combination with Davey et al. (U.S. Pa. No. 4,797,314 (“Davey”)). Claims 32, 34 and 38 have been canceled without prejudice, rendering these rejections moot.

The Examiner further rejected claims 1, 3, 6-8, 20, 22, 25, 27-30 and 33 over SU 907036 (“SU ‘036”) in combination with Christy or Miller in further combination with Giessler. Claim 1 has been amended to recite 40-60% polyvinyl chloride resin, among other amendments. Su ‘036 describes a modeling composition including 67-75% PVC, 16-20% plasticizer, 2-5% paraffin, 1-11% CaO and the remainder filler. However, the PVC disclosed by SU ‘036 is outside the claimed range of 40-60% in the presently amended claims. Furthermore, SU ‘036 does not disclose or suggest an epoxidized soybean secondary plasticizer, a heat stabilizer comprising zinc, dry expanded microspheres, glass microspheres, or a rheology modifier comprising a thixotropic agent comprising an organic filler. Neither Christy nor Miller disclose polyvinyl chloride in the presently claimed weight percentages. Indeed, Miller teaches away from the present claims by incorporating water in preferred amounts from about 43% to about 49% by weight” (See column 4, 56-58).

In view of the present amendments more particularly reciting the invention, applicants respectfully submit claims 1 and 9 are patentable over SU ‘036 in combination with any other reference(s), and respectfully request that such rejection be withdrawn.

Conclusion

Applicants submit that the claims, identified in the listing of claims, are in condition for allowance and respectfully request the same. The Examiner is invited to call the undersigned attorney to discuss any outstanding issues or concerns so that allowance of the present application may be expedited.

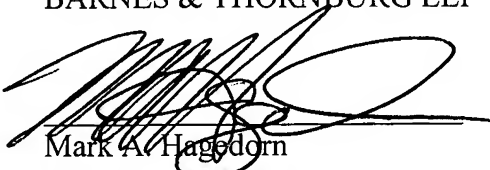
If needed, Applicant hereby petitions for an appropriate extension of time and entry of this Amendment. The Commissioner is also hereby authorized to charge any required additional fees to Deposit Account No. 12-0913 referencing Attorney Docket number 921142-96499. The Applicants therefore respectfully request favorable reconsideration and allowance of this application.

Respectfully submitted,

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